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THE WEST AMERICAN SPECIES OF PLEUROTOMA, SUBGENUS GENOTA.

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Five species of the subgenus *Genota*, section *Dolichotoma*, have been described from the Pacific coast of North America. Three of the species have been figured; two have not hitherto. Specimens of all five, including the types of four, being temporarily in possession of the writer, it seemed desirable to bring them together in a single photographic plate. Apparently derived from a common stock, and arising in late tertiary time, the nominal species are closely allied. Yet there is convenience in retaining the present specific designations of forms which are readily distinguishable. Two of the species have not thus far been found living. As the deeper water along the coast is explored, they may possibly be discovered in the dredge, together with other forms not now known.

Pleurotoma (Genota) carpenteriana Gabb.

Pleurotoma (Surcula) carpenteriana Gabb. Proc. Cal. Acad. Nat. Sci., 1865, p. 183; Pal. Cal., vol. 2, p. 5, pl. 1, fig. 8.

Pliocene.—San Fernando and Santa Rosa (Gabb); San Diego (Dall).

Pleistocene.—Santa Barbara and San Pedro (Gabb); San Pedro, San Diego and Ventura (Arnold); Santa Monica (Rivers).

Living.—Drake's Bay, 30 fathoms (Arnheim); Monterey to San Diego (Cooper); San Pedro, Santa Catalina Island and San Diego, 10 to 100 fathoms (Raymond); Cerros Island (Dall).

This is the largest and most plentiful species of the group. It is

characterized by a regularly fusiform outline, eight whorls, fine spiral sculpture, slight concavity near the suture, slight convexity of the anterior part of the upper whorls, the obtuse shoulder thus formed being *below* the middle of each whorl and sometimes ornamented with inconspicuous nodes. Plate II, fig. 1, illustrates Gabb's type, found in the pleistocene of Santa Barbara. It is the property of the University of California. Fig. 3 shows an example close to type. It was dredged in about 100 fathoms, off Santa Catalina Island. Length 80 mm. In fig. 2 the nodes are distinguishable, which when better developed are a diagnostic feature of the next species. Length 54 mm.

Pleurotoma (Genota) tryoniana Gabb.

Pleurotoma (Surcula) tryoniana Gabb, Pal. Cal., vol. 2, p. 6, pl. 1, fig. 9.

Pleistocene.—San Pedro (Gabb); Santa Barbara and San Pedro (Cooper); Santa Monica (Rivers).

Living.—San Diego (Cooper); San Pedro (Oldroyd).

Typically the angular, nodose whorls, eight in number, separate this species from *Genota carpenteriana*, but intermediate forms like the example shown in fig. 2 are found rarely, and indicate the close alliance of the two species. Plate II, fig. 7, illustrates Gabb's type, found in the pleistocene of San Pedro. Fig. 8 represents a specimen found at Santa Monica. Its length is 62 mm.

Pleurotoma (Genota) cooperi Arnold. Mem. Cal. Acad. Sci., Vol. III, p. 203, pl. vii, fig. 3.

Pleistocene.—San Pedro (Arnold); Santa Monica (Rivers).

Characterized by the angular whorls, seven or eight in number, decidedly concave above the nodose angle, with relatively sharp sculpture. The nodes are more numerous than in the last species and become less prominent toward the aperture. Aperture less than half the length of the shell. Plate II, fig. 10, illustrates the single specimen found in the pleistocene of Santa Monica.

Pleurotoma (Genota) stearnsiana Raymond. NAUTILUS, Vol. XVIII, p. 1.

Living.—San Diego and Santa Catalina Island, 25 to 40 fathoms (Raymond).

The species is characterized by its small size, eight or more whorls, relatively wide form and broad color bands. Plate II, fig. 6, represents the type. Length 30.5 mm. An old specimen, length 41.5 mm., is shown in fig. 5, and a younger example in fig. 4. All are from San Diego.

Pleurotoma (Genota) riversiana Raymond. NAUTILUS, Vol. XVIII, p. 14.

Pliocene.—Santa Monica (Rivers).

Characterized by narrow form, sharply expressed sculpture and obtuse angle *above* the middle of the whorls. Plate II, fig. 9, illustrates the type which thus far is the only specimen found. Length 59 mm.

University of California, July, 1906.

NOTE ON THE GENUS GLABARIS GRAY OR PATULARIA SWAINSON.

BY WILLIAM HEALY DALL.

The genus *Patularia* Swainson, appears in his *Malacology* (1840) pp. 287 and 381. There are two species of which the first is *Anodon ovatus* Swainson, *Exotic Conchology* pl. xxxvi, 1823, (2nd ed. by Hanley, p. 30, 1841) not *Iridina ovata* Swainson, *Phil. Mag.*, 1823. The second species *A. rotundatus* Swainson, is doubtfully referred to *Anodonta* by Simpson in his *Synopsis*, p. 638. If it be as he supposes synonymous with *A. woodiana* Lea, Swainson's name dating from 1823, will of course take precedence. In 1841 Swainson cites under his *Patularia ovata* *Anodonta trapesialis* Lamarck, and Hanley points out that the latter specific name, being four years older, must take precedence of *ovatus* Swainson. *Anodonta trapesialis*, however, in modern classification, is a typical *Glabaris* of Gray. But *Glabaris* Gray, dates only from 1847, when the name was applied to *A. exotica* Lamarck, by Gray, in his list of generic synonyms, *Proc. Zool. Soc. Lond.*, 1847, p. 197.

It would seem, therefore, that, since the first species and type of *Patularia* is a *Glabaris*, that the former name should be substituted for the latter in our systems. An examination of the nomenclators fails to show any earlier use of the generic name *Patularia* in zoölogy and there seems to be no reason which would militate against its adoption.